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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,731	10/25/2006	Stefan Leyen	DNAG-310	1384
	7590 12/27/201 & JAWORSKI, LLP	EXAMINER		
666 FIFTH AV	Е		STEWART, JASON-DENNIS NEILKEN	
NEW YORK, NY 10103-3198			ART UNIT	PAPER NUMBER
			3738	
			NOTIFICATION DATE	DELIVERY MODE
			12/27/2010	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
	10/549,731	LEYEN ET AL.
Office Action Summary	Examiner	Art Unit
	JASON-DENNIS STEWART	3738
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING DJ - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>06 O</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This  3) ☐ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☑ Claim(s) <u>35-45</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>35-45</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Bureau  * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate

## **DETAILED ACTION**

The following is a Non-Final Office action in response to communications received on 10/06/2010. Claims 35-45 are currently pending and addressed below.

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 35-41, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunz et al. WO 01/05338 in view of Martinie 3,683,421.
- 3. Regarding Claims 35-37, Bunz discloses a hip joint prosthesis comprising an inner sliding cup made of ceramic material that is surrounded on its outside by a plastic covering for inserting into an outer, metal cup of an artificial hip (abstract).

However, Bunz does not disclose a plurality of surface depressions arranged circumferentially on the outside of the sliding cup.

Martinie teaches a prosthetic joint assembly with a socket assembly in which a bone attachment socket has a plurality of projections or ribs 62 on its out surface to

more firmly secure it to an acrylic seat 56 which would have mating depressions (col. 3, II. 17-23).

It would have been obvious to one or ordinary skill in the art to modify the attachment mechanism of Bunz with the plurality of projections or ribs of Martinie in order to more firmly secure a socket to the seating portion as taught by Martinie (col. 3, II. 17-23).

- 4. Regarding Claim 38, Bunz in view of Martinie does not explicitly teach that the depressions are "semicircular"; however, Martinie does teach that other configurations other than the projections or ribs may be employed to secure the socket. It would have been an obvious matter of design choice to make the depressions and mating depressions semicircular, since the applicant has not disclosed that semicircular depressions solve any problem or is for a particular reason. It appears that the claimed invention would perform equally well with the more angular projections and depressions of Martinie.
- 5. Regarding Claim 39, Bunz illustrates a sliding cup (1) having a stepped structural form on its outside (fig. 2).
- 6. Regarding Claim 40, Bunz illustrates the plastic covering embracing the sliding cup at its pin end (fig. 2).
- 7. Regarding Claim 41, Bunz illustrates a collar of the plastic covering 5 that rests on the upper side of the sliding cup and covers almost half of the upper edge (fig. 2).

8. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bunz et al. WO 01/05338 in view of Martinie 3,683,421, as applied to Claim 35, further in view of Teinturier (5,041,140).

Bunz in view of Martinie discloses the invention as claimed and as discussed above. Martinie also teaches the firm "seating" of an attachment socket into an acrylic seat. However, although implied, Bunz in view of Martinie does not clearly disclose a press fit between the sliding cup and the plastic covering.

Teinturier teaches a press fit between a plastic cup 42 and a metal shell in order to allow the acetabulum unit to adapt to deformations of the skeleton as taught by Teinturier (col. 4, II. 59-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sliding cup of Bunz in view of Martinie by press fitting it into the plastic covering as taught by Teinturier in order to allow for deformation of the skeleton by the hip prosthesis.

- 9. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunz et al. WO 01/05338 in view of Martinie 3,683,421, as applied to claim 35 above, and further in view of McLean et al. 2004/0054418.
- 10. Regarding Claim 43, Bunz in view of Martinie discloses the invention as claimed and as discussed above. However, Bunz in view of Martinie does not disclose an eccentric relationship between the inner and outer form of the sliding cup.

McLean et al. discloses a hip implant with an eccentric relationship between the inner surface 30 and the outer surface 26 of an articulating surface shell in order to improve migration and other properties of the prosthesis (paragraph 49).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sliding cup of Bunz in view of Pope with the eccentric relationship of McLean in order to optimize articulating wear properties of the sliding cup relative to the femoral head (paragraph 49).

11. Regarding Claim 44, Bunz in view Martinie and further in view of McLean discloses the invention as claimed and discussed above, however Bunz does not positively recite the range claimed in Claim 34. It has been held that "the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages." *In re Peterson*, see MPEP 2144.05, Part II, section A.

#### Response to Arguments

12. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, as per the Notice of References Cited. Oueveau et al. 4,822,369 teaches depressions and projections for locking layers of a hip joint prosthesis together.

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Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JASON-DENNIS STEWART whose telephone number

is (571)270-3080. The examiner can normally be reached on M-F (alt Fridays off) 7:30-

5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Corrine McDermott can be reached on (571)272-4754. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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/Jason-Dennis Stewart/

Examiner, Art Unit 3738

/Corrine M McDermott/

Supervisory Patent Examiner, Art Unit 3738

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